WP6 – INDIVIDUALIZED IMMUNE MANAGEMENT

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Within the RECORDS project (RHU 2019), we will, with support from our industrial and academic partners (Biothelis and UVSQ) 1) validate the role of plasma levels of endocan (endothelial biomarker) in monitoring proinflammatory versus immune-supressed state, 2) assess the add-on value of urinary levels of cathepsin G-cleaved endocan, and the add-on value of exhaled endocan, 3) we will characterize GILZ-expression on monocytes, total leukocytes and whole blood that correspond to corticosteroids responsiveness, and test for interactions with mutations in GR (NR3C1) or MR (NR3C2) genes using

transgenic mice, 4) we will characterize transcriptomic signatures for corticosteroids resistance/sensitivity.

Outside the RECORDS project, we will 1) extensively phenotype sub-populations of leukocytes that are specific for proinflammatory versus immune suppressed state (including T reg, B reg, myeloid derived suppressive cells, intermediate and non-classical monocytes), 2) quantify NETs (Neutrophil Extracellular Traps) from whole blood by flow cytometry, 3) identify multi-omics signatures of responsiveness to various immune-modulators (e.g., anti-TNF, interferon gamma, IL- 7, anti-PD1, thymosine).